

Application No.: 09/496,516  
Amendment dated: July 9, 2003  
Reply to Office Action of: April 9, 2003

SAR-12165A

**Amendment to the Abstract:**

Please delete the existing abstract and replace it with the attached abstract. The new abstract conforms to the invention as claimed in the Divisional application.

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#### **ABSTRACT**

A decoder that receives a Manchester encoded signal including a start of frame sequence followed by coded data values followed by an end of frame sequence. The decoder also includes a detector that detects the start of frame sequence and the end of frame sequence to determine a beginning and end of the coded data values in the Manchester encoded frame. The decoder includes an integrator with hysteresis that includes an up-down counter and provides an output signal responsive to upper and lower threshold values. The output signal is applied to a discriminator that includes a counter which counts up in response to one value of the output signal of the integrator and is reset in response to the other value of the output signal of the integrator.